

Summary of the Office Action

Restriction made Final

The Examiner acknowledged Applicant's election with traverse of Species I (claims 1-3, 4-9, 18-35, and 38-53). The Examiner did not find the traversal persuasive because the claimed methods and apparatus used to achieve the overall effect (move the drill bit in the desired direction) defined different inventions. Therefore, the restriction requirement was deemed proper and was made FINAL.

Drawings

The Examiner objected to drawings and in particular to Figures 1, 3, 5A and 5B, 6, 9, 10, 11 and 14. (It should be noted that all of the figures were submitted as informal drawings and technically none of the figures met the standards of the Office.)

The Examiner objected to Figures 1,3,6,9 and 14, stating that, "all have section lines designated as capital letters (usually A-A and B-B). Each of these section lines should be designated with a different Roman or Arabic reference. These changes should be reflected in the Specification as well as the drawings."

The Examiner further objected to Figure 1, stating that, "cross sections A-A and B-B are shown but there are no figures associated with these cross sections."

The Examiner also objected to Figure 6 stating essentially that, "Figure 6 is identical to Figure 1." The Examiner continued in his objection stating that, "Page 19 of the specification indicates that 'To avoid unnecessary repetition, the same reference numerals have been used (in Figure 6) as for Figure 1.' This is not appropriate unless the components represented by the same reference numbers are identical -- and in this case, the components are not identical. If the components were identical, the figures would be redundant, and it would be appropriate to delete one of the figures."

The Examiner objected to Figures 5A and 5B stating that, "although the device is described as turning in Figures 5A and 5B, the drill bit is shown as centered in the well bore and not biased in the direction of the turn, as described in the specification."

The Examiner objected to Figure 10 because no crosshatching was shown for the inner sleeve in Figure 10. The Examiner continued his objection to Figure 10 stating that, "Reference

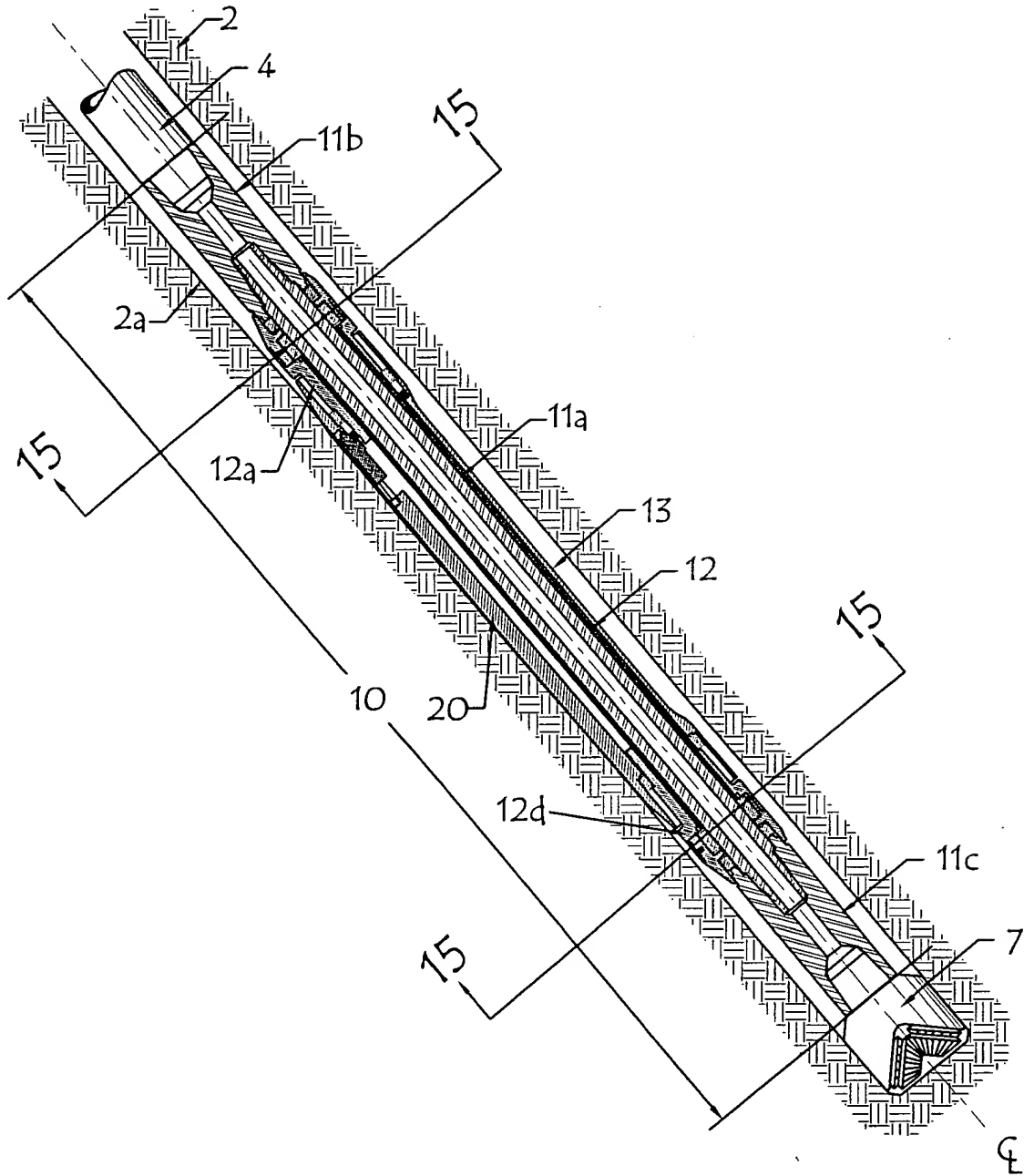


FIG.1

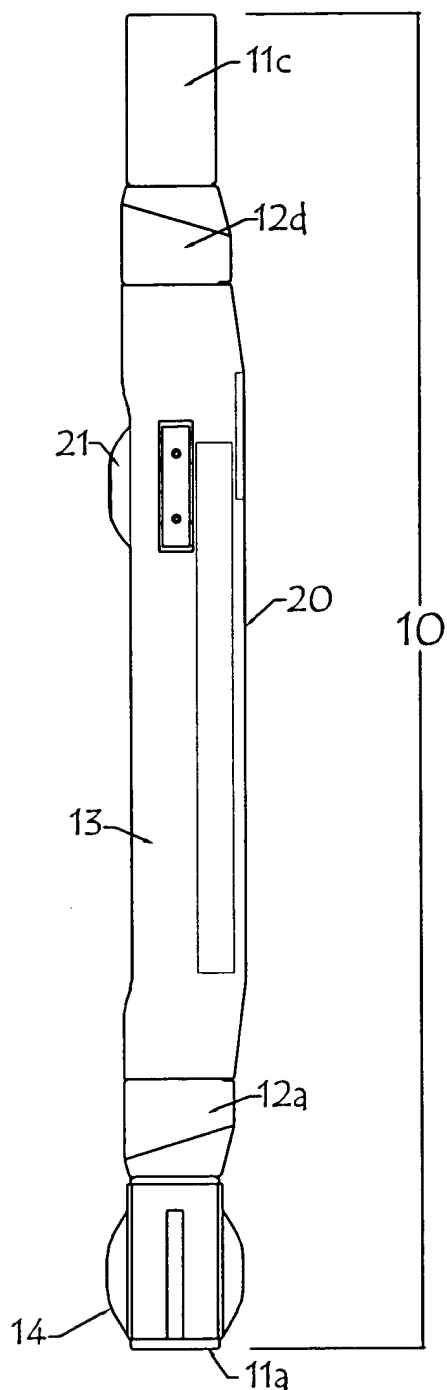


FIG. 2

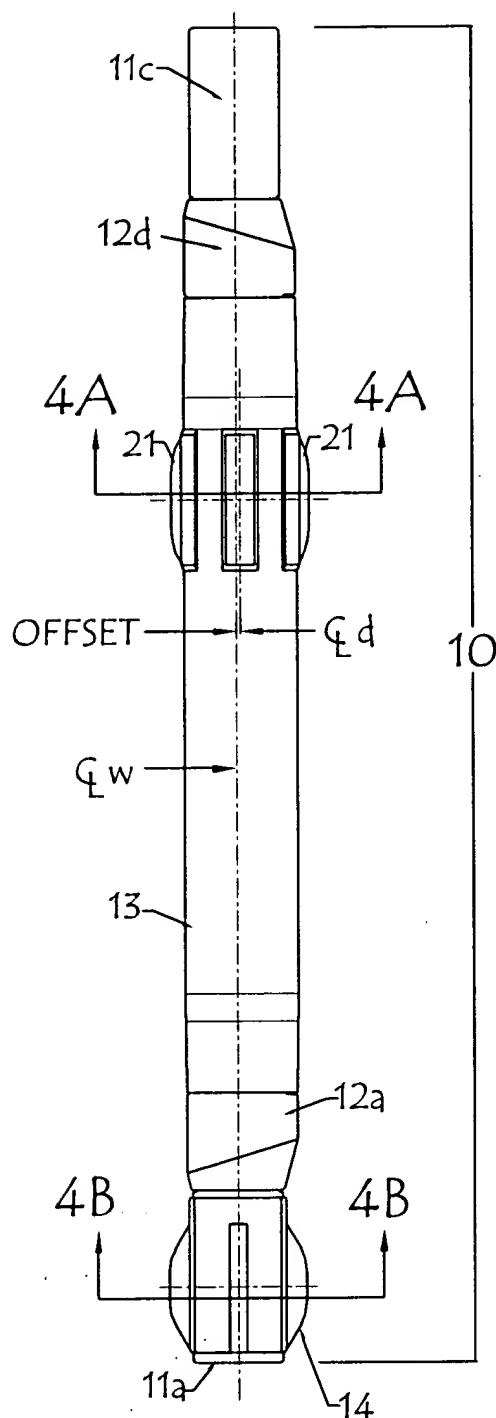


FIG. 3

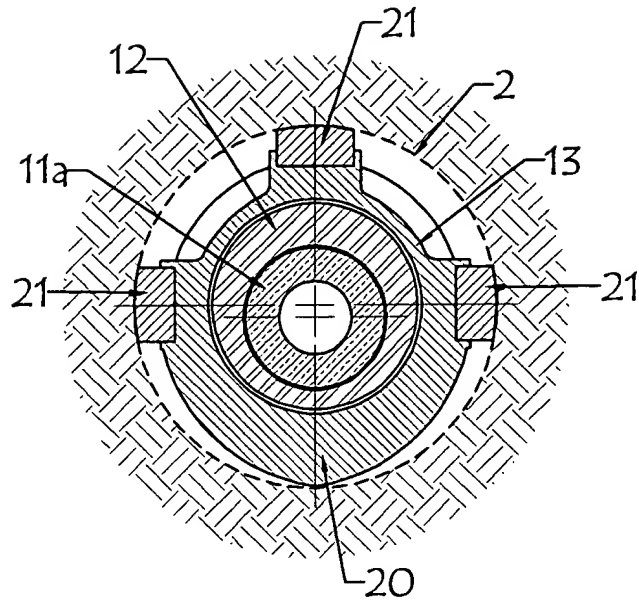


FIG. 4A

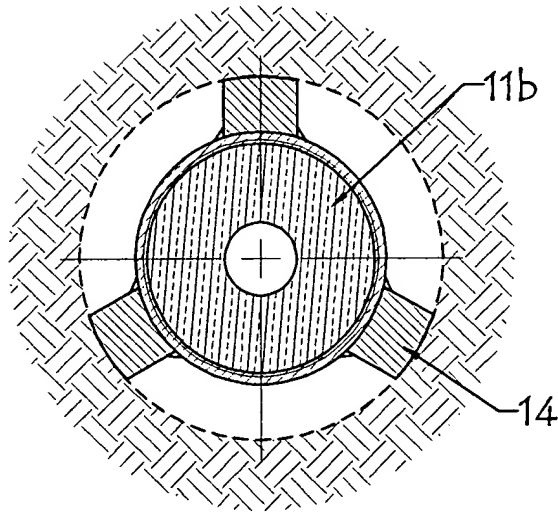


FIG. 4B

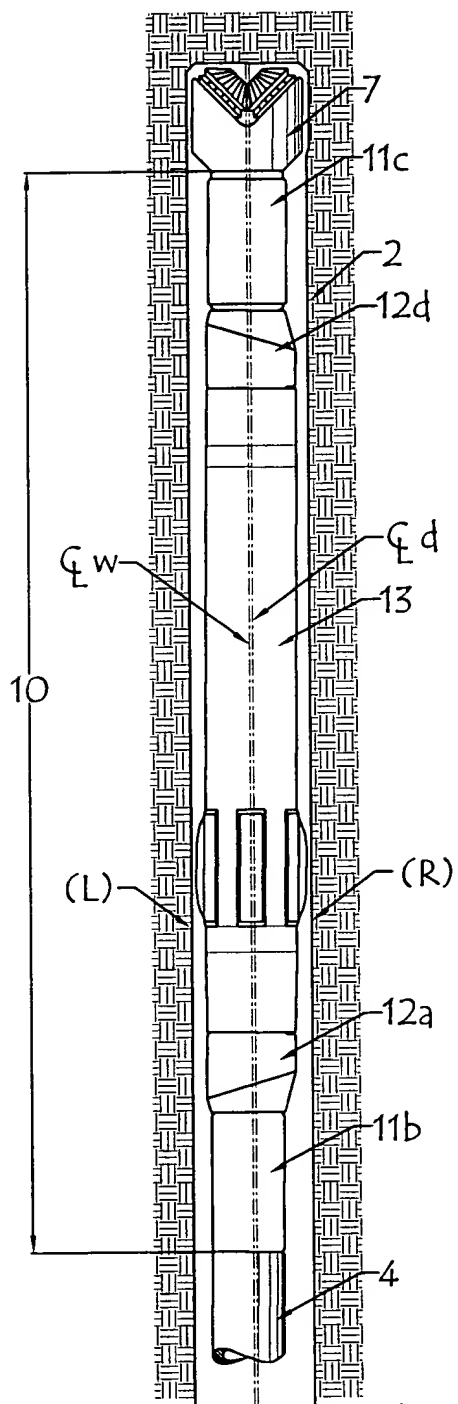


FIG. 5A

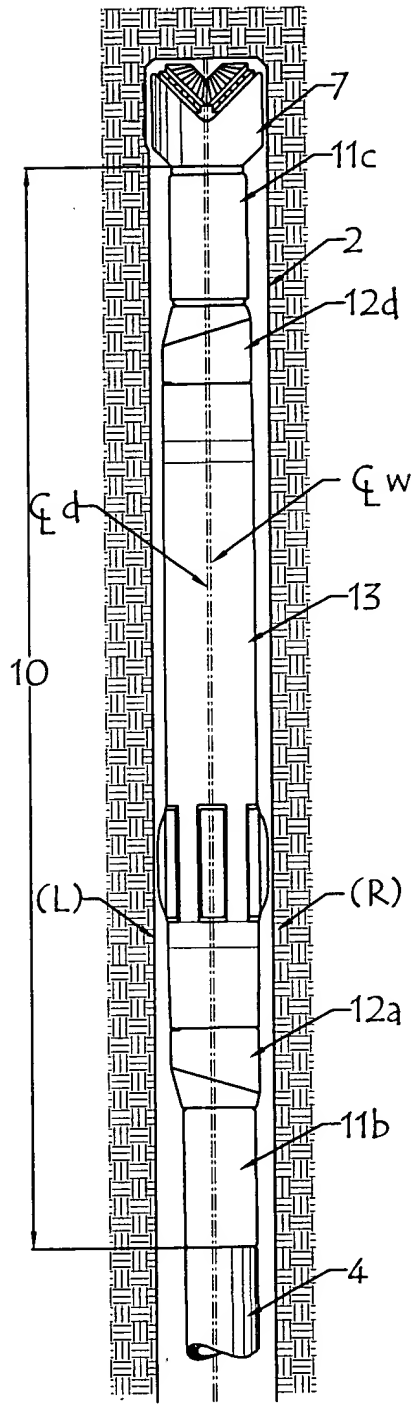


FIG. 5B

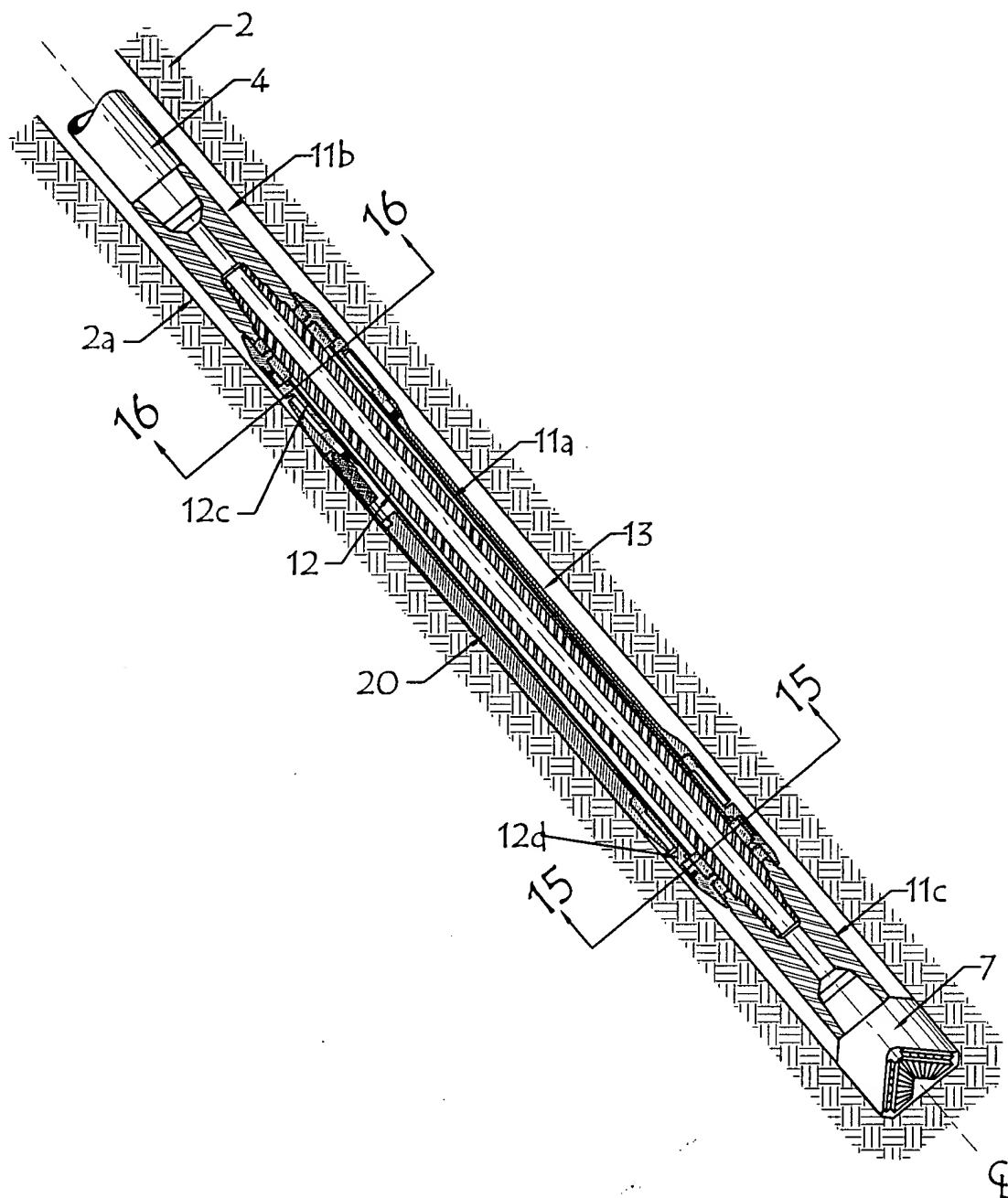


FIG. 6

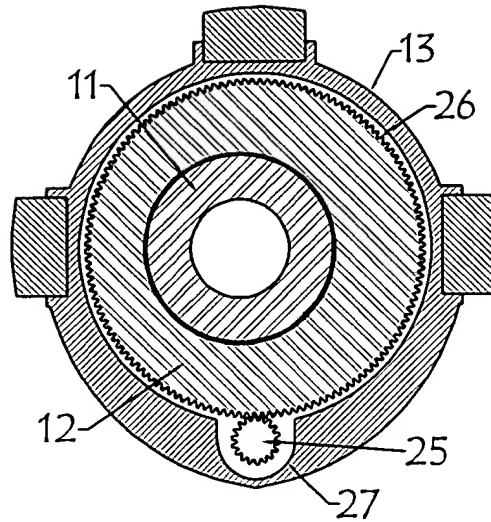


FIG. 7A

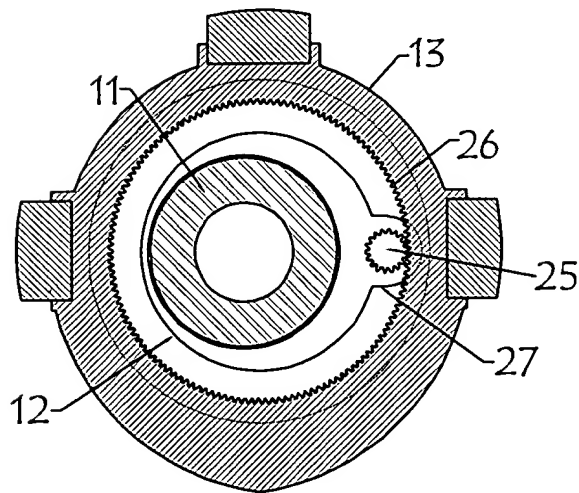
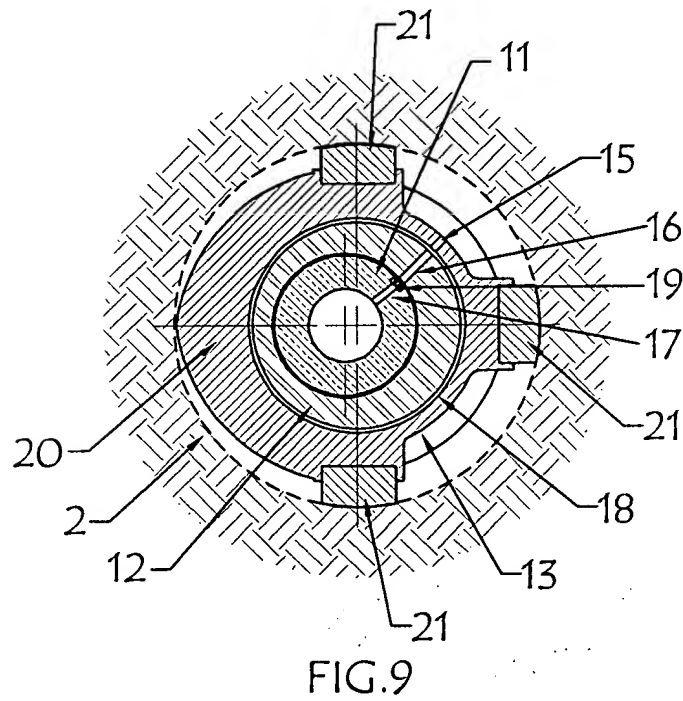
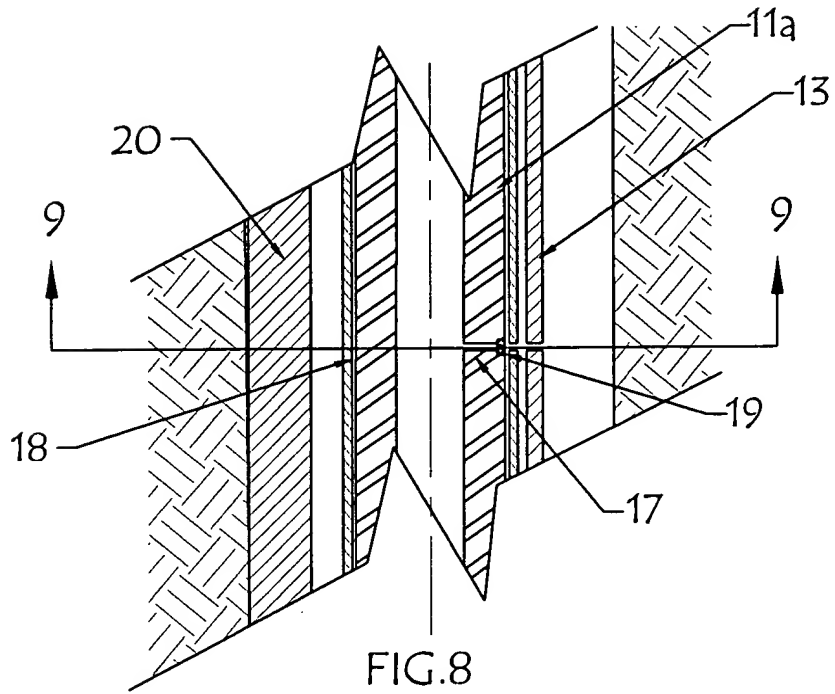


FIG. 7B



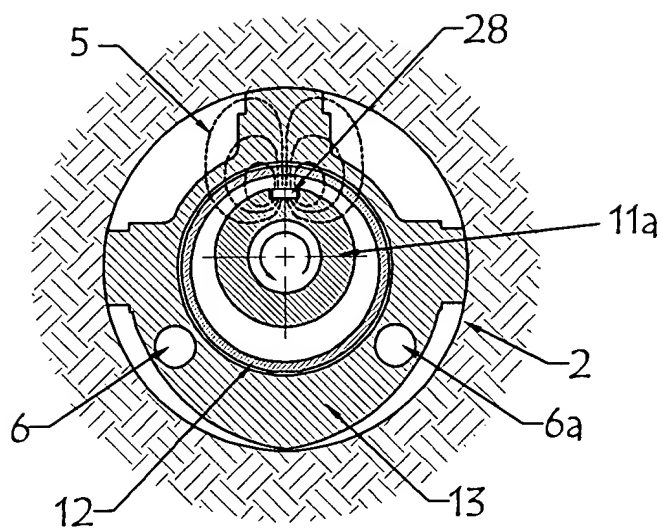


FIG. 10

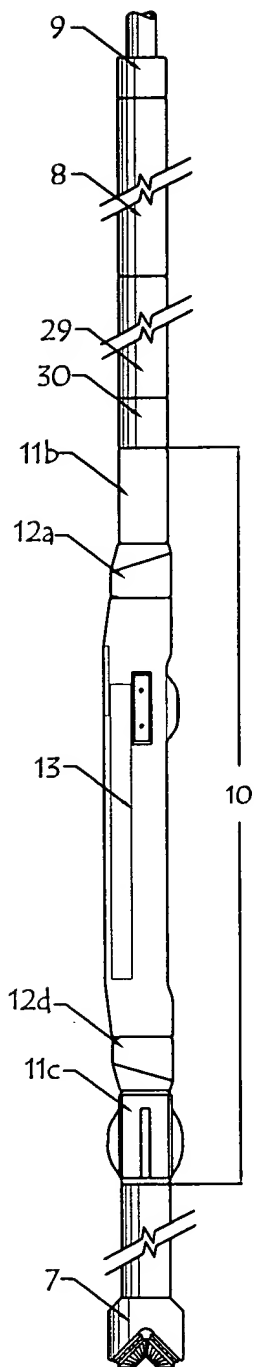
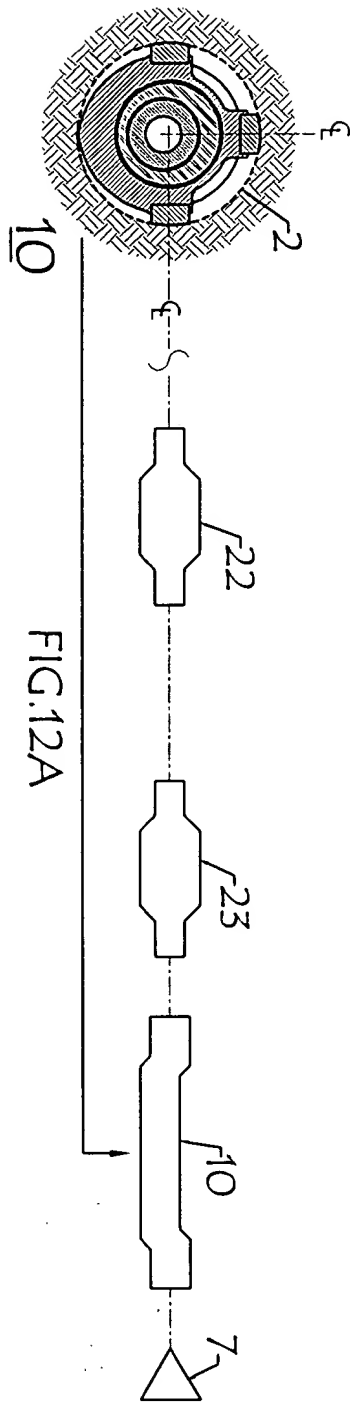
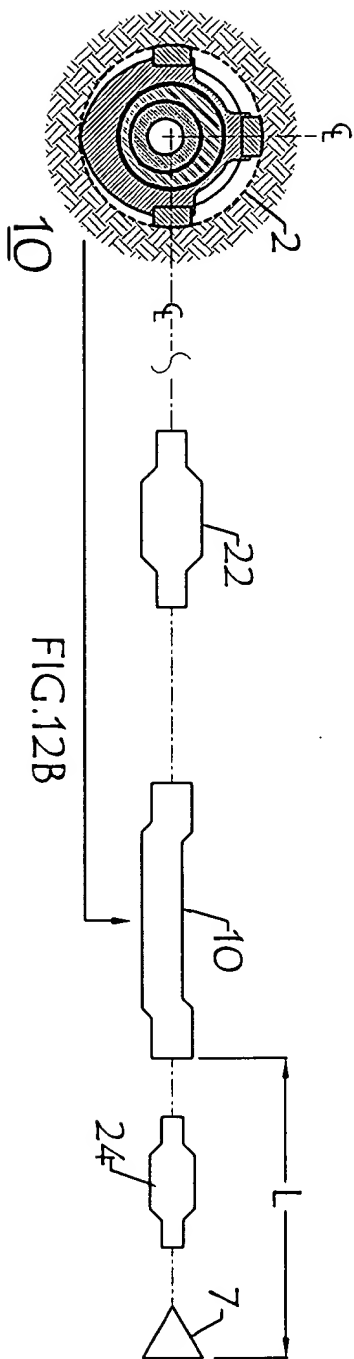


FIG.11



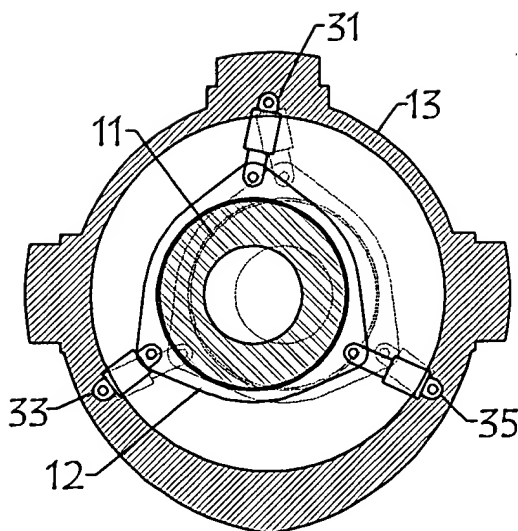


FIG. 13

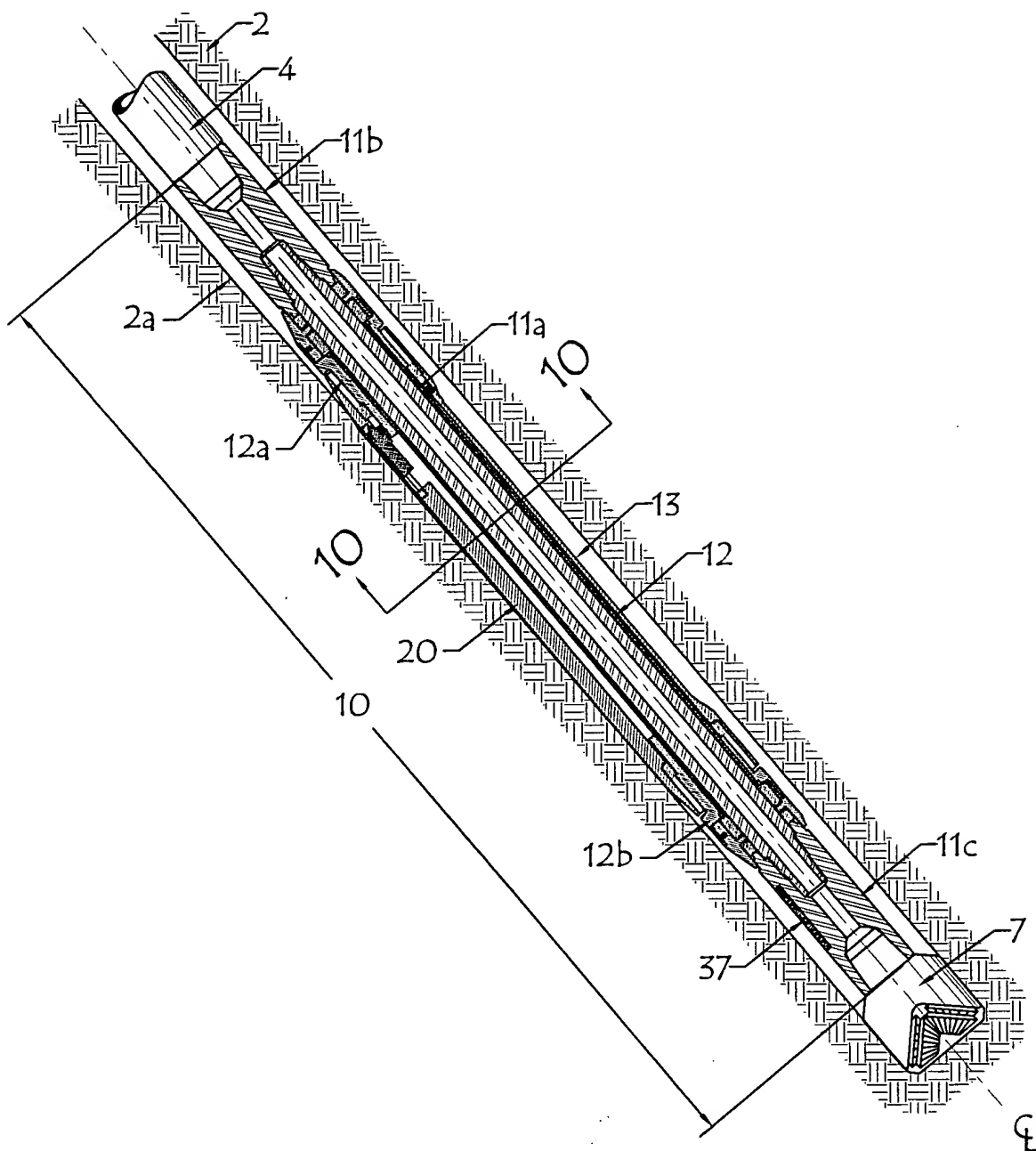


FIG.14

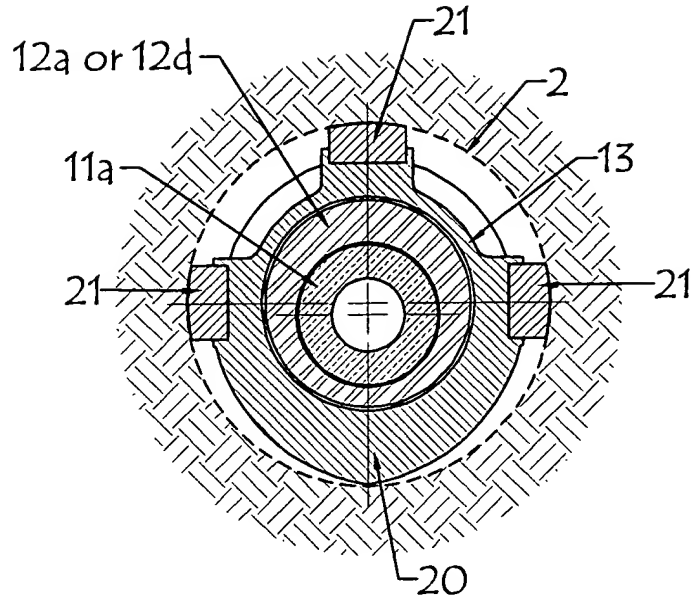


FIG. 15

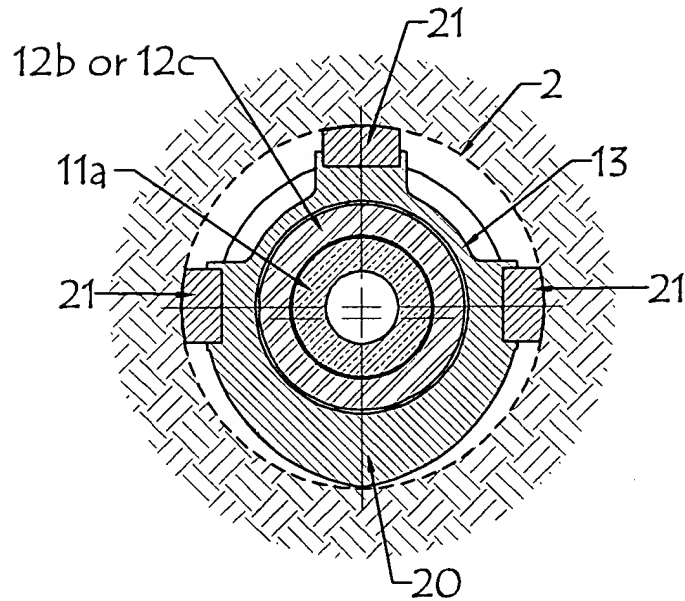


FIG. 16

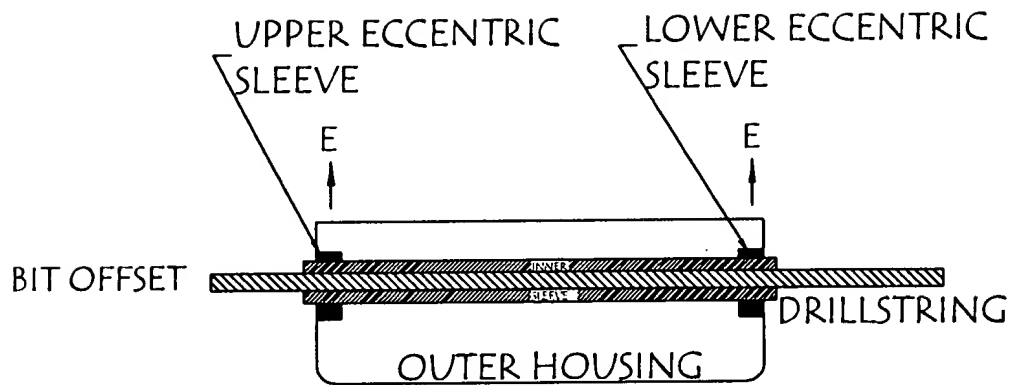


FIG.17A

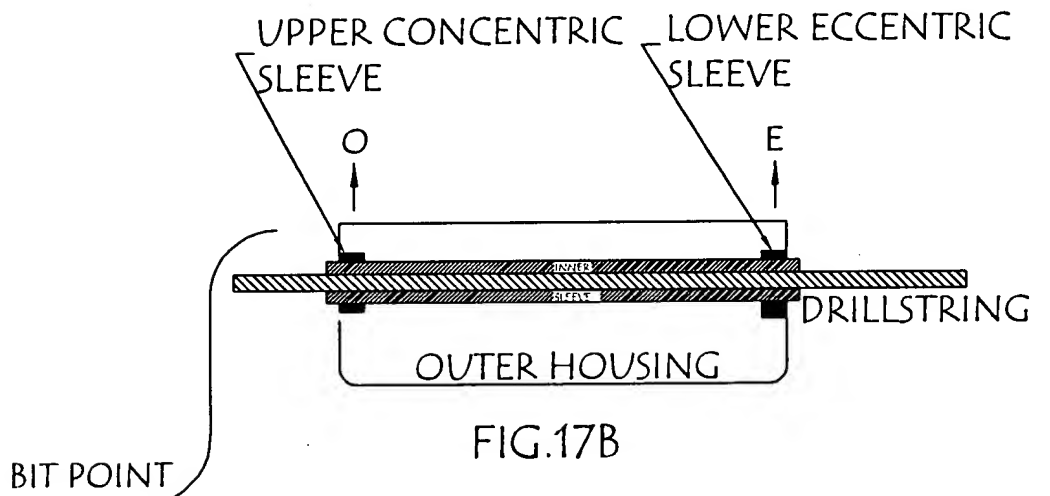


FIG.17B

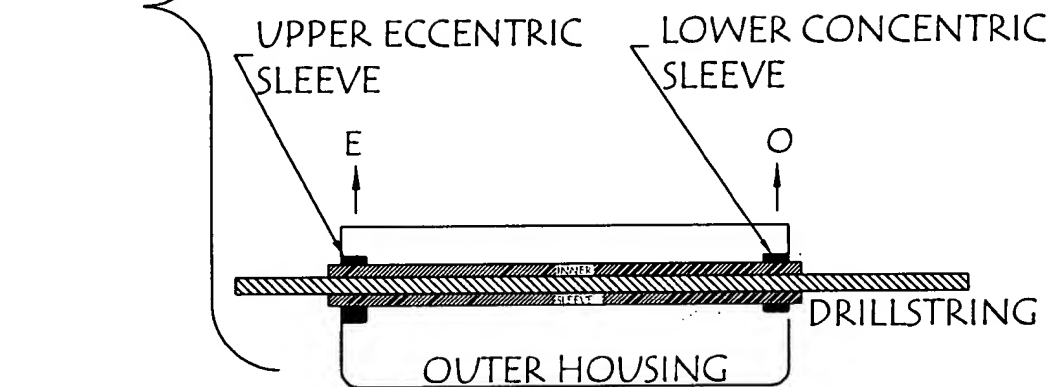


FIG.17C

